TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

4

June 20, 2008

TO:

Internal File

THRU:

Steve Christensen, Environmental Scientist II, Team Lead

FROM:

Priscilla Burton, CPSSc, Environmental Scientist III. Plub by an

RE:

Wellington Dry-Coal Cleaning Facility Application, Headwaters, Incorporated,

Coval, Permit C/007/0045 and Task ID #2899

SUMMARY:

The Headwaters, Inc. Wellington Dry Coal Cleaning Facility has been in operation since January 2006 (Section 1.1.1). The application for permit was received on January 15, 2008. The permitting chronology is as follows:

- Division determination to permit dated March 17, 2006. (M:\FILES\COAL\PERMITS\007\C0070045\2006\OUTGOING/0001.pdf).
- COVOL appeal of decision to permit May 12, 2006 (2006/Incoming/0001 and 0003.pdf).
- Stipulation and Joint Motion for Continuance, dated October 20, 2006, refers to settlement agreement to be set forth at a later date (M:\OGMBOARD\Mining\C-007-045/C-007-045 2006-p011.pdf).
- Order for Continuance dated October 25, 2006, suspending action before the Board until further notice (M:\OGMBOARD\Mining\C-007-045/C-007-045 2006-0009.pdf).

The settlement agreement is not part of the Board file record or the Coal Program records. Steve Alder provided a copy of the [preliminary] settlement negotiations to the Coal Program during a meeting on June 13, 2008. The settlement negotiations letter is dated October 19, 2006, and is in the form of a letter from Steve Alder, Attorney for Division of Oil, Gas & Mining to Craig D. Galli, Attorney for COVOL. The subject line indicates "RE:Settlement Negotiations between COVOL Engineered Fuels, LLC and the Division of Oil, Gas & Mining."

The October 19, 2006 settlement negotiations letter states the premise for the technical review, but acknowledges a formal settlement agreement will follow. The following information provides a status report on the five actions to be taken by COVOL and the DIVISION, as stated in the settlement negotiations letter.

- 1) COVOL would complete an environmental audit of the COVOL site and share the background data with the Division. The environmental audit was provided to the Division, separately from the application. It is found in M:\FILES\COAL\PERMITS\007\C0070045\2006\INCOMING\11152006.
- 2) COVOL would provide a rough outline of an expected permit with an industrial post mining land use. The rough outline was received December 22, 2006, and filed at a later date, see M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf.
- 3) COVOL and the Division would take advantage of environmental information provided in adjacent permits. The environmental information is referenced, but not included in the application.
- 4) Division would evaluate the proposed permit outline and provide feedback. The rough outline was reviewed on March 13, 2007, see M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0002.pdf.
- 5) Once the outline was reviewed, a formal settlement agreement would be entered into and dismissal of the case before the Board would be sought. Status: pending.

TECHNICAL ANALYSIS:

GENERAL CONTENTS

IDENTIFICATION OF INTERESTS

Regulatory Reference: 30 CFR 773.22; 30 CFR 778.13; R645-301-112

Analysis:

The Applicant is COVOL Engineered Fuels, LC. (COVOL), is a subsidiary of Headwaters Energy Services Corporation, both are located in South Jordan, UT (Section 1.1.2). Gina Rao is the Environmental Manager. It is not clear whether she is also the resident agent. An organizational chart would be helpful to illustrate the family tree. i.e. How are Headwaters Energy Services Corp and Headwaters, Incorporated related? How do COVOL Fuels No. 2 and COVOL Fuels No. 3 fit into the family tree?

Officers and directors for Headwaters, Inc., Headwaters Energy Services Corp. and COVOL are provided in Section 1.1.2.3, along with the companys' South Jordan address and phone and COVOL's local Carbon County address and phone..

The application lists one pending associated permitted site in KY under affiliated company COVOL Fuels No. 2 and one pending un-permitted site in KY for affiliated company COVOL Fuels No. 3 (Section 1.1.2.4). Yet, an Applicant Violator System (AVS) check indicates 5 permitted mining operations in AL and IN are operated by COVOL Engineered Fuels, LC. and three permitted sites in KY are operated by affiliated companies. This discrepancy should be addressed.

The application states in Section 5.3.6 that "coal processing waste' is converted into a marketable product. Therefore, this material is considered a product, not a waste." This issue should be addressed in the application. For instance, the Division understands that COVOL Engineered Fuels, LC is not responsible for AML fees on material received from Savage Services Corp.(see January 2, 2008 letter from Jennifer Smith, OSM, to Commonwealth Coal Services of Virginia.) And a recent OSM inspection report (2008/Incoming/0003.pdf) indicates that R.O.M. coal is a source of raw material. In this case, the coal mine would have already paid the royalty on the R.O.M. coal. The Applicant should document communication with OSM concerning a "no-value" determination for waste transported to the Sunnyside Co-Generation plant.

R645-301-112.600 provides surface ownership information. Subsurface ownership is not identified, because no subsurface activity will occur on property. The applicant has stated no interest in contiguous lands.

The site has MSHA ID#42-02398.

Findings:

The information provided does not meet the requirements of Identification of Interests. Prior to approval, please provide the following, in accordance with:

- **R645-301-112.320** Include an organizational chart to illustrate the family tree. i.e. How are Headwaters Energy Services Corp and Headwaters, Incorporated related?
- **R645-301-112.230,** Provide the name address and telephone number of the person who will pay the abandoned mine fee and/or discuss the status of the abandoned mine fee.
- **R645-301-112.400**, Please explain why the application lists only one pending associated permitted site in KY under affiliated company COVOL Fuels No. 2 and one pending un-permitted site in KY for affiliated company COVOL Fuels No. 3 (Section 1.1.2.4), yet the OSM database indicates 5 permitted mining operations

in AL and IN are operated by COVOL Engineered Fuels, LC. and three permitted sites in KY are operated by affiliated companies.

VIOLATION INFORMATION

Regulatory Reference: 30 CFR 773.15(b); 30 CFR 773.23; 30 CFR 778.14; R645-300-132; R645-301-113

Analysis:

No violations are reported for the company or its affiliates (Section 1.1.3). This fact was confirmed by an entity evaluation conducted through OSM's Applicant Violator System on March 13, 2008.

Findings:

The information provided meets the requirements of the Coal Rules.

RIGHT OF ENTRY

Regulatory Reference: 30 CFR 778.15; R645-301-114

Analysis:

The applicant is the surface landowner (Section 1.1.4). Thirty acres is owned by COVOL Engineered Fuels, LC (Sec. 1.1.2 and 1.1.2.5). Please describe legal documents providing ownership, by type and date of execution and identify the specific lands to which the document pertains.

Findings:

Information provided does not meet the requirements of the following Coal Rule:

R645-301-114.100, Provide a description of the ownership documents (type and date of execution) and identify the specific lands to which the document pertains.

LEGAL DESCRIPTION AND STATUS OF UNSUITABILITY CLAIMS

Regulatory Reference: 30 CFR 778.16; 30 CFR 779.12(a); 30 CFR 779.24(a)(b)(c); R645-300-121.120; R645-301-112.800; R645-300-141; R645-301-115.

Analysis:

The thirty-acre facility is located in Sec. 14, T 15 S, R 10 E, 2 miles west of Wellington city limits, in Carbon County. A more precise description is found in the Reclamation Agreement (M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0012.pdf).

The site is located in an area that has an industrial zoning by the County. There is no unsuitability issue.

Findings:

The information provided meets the requirements of the Coal Rules.

PERMIT TERM

Regulatory References: 30 CFR 778.17; R645-301-116.

Analysis:

The permit term is five years, beginning 2008.

Findings:

The information provided meets the requirements of the Coal Rules.

PUBLIC NOTICE AND COMMENT

Regulatory References: 30 CFR 778.21; 30 CFR 773.13; R645-300-120; R645-301-117.200.

Analysis:

Liability insurance is found in Appendix 8-1. The insurance is carried by the parent company Headwaters Incorporated and covers the permitted site. There is no blasting coverage (and no blasting will be conducted at the site, see 2007/Incoming/0014.pdf.

Public notice of the permitting action was published in the Sun Advocate on March 18, 25, April 1, and April 8, 2008. No public comments were received. Ad affidavit of publication must be included with the application.

Findings:

The information provided must be updated to meet the following Coal Rule:

R645-301-117.100, A copy of the publication or affidavit of publication must be made part of the application within 4 weeks of the last date of the publication.

FILING FEE

Regulatory Reference: 30 CFR 777.17; R645-301-118.

Analysis:

Division files do not show any record of collecting a filing fee at the time of application submittal (Section 1.1.8).

Findings:

R645-301-118, Provide documentation of filing fee payment.

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The Division determined in 2004 that the COVOL operation would not likely be permitted. This 2004 determination is not in the coal program files for the C/007/0045 site. The determination to permit the site was made on March 17, 2006, after much of the site had been developed without the collection of background environmental data.

The Headwaters, Inc. Wellington Dry Coal Cleaning Facility has been in operation since January 2006 (Section 1.1.1). The application for permit was received on January 15, 2008. The permitting chronology is as follows:

- Division determination to permit dated March 17, 2006.
 (M:\FILES\COAL\PERMITS\007\C0070045\2006\OUTGOING/0001.pdf).
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The October 19, 2006 settlement negotiations letter states the premise for the technical review. The application follows a format prescribed by the October 19, 2006 [preliminary] settlement negotiations letter which indicates in item 6 that a formal settlement agreement will follow.

Findings:

The Coal Rules and the negotiation settlement letter dated October 19, 2006 provide the basis for the permitting application. Prior to approval, Please provide the following information in the permit application: Prior to approval, the permit application should include the following information, in accordance with:

R645-301-122, Provide in the application, a copy of letter from Mary Ann Wright to W. Layne Ashton, COVOL Engineered Fuels, LC, September 13, 2004 stating the initial Division determination that mining would not be taking place at this site.

•Provide with application, a copy of the October 19, 2006 letter from Steve Alder to Craig Galli which outlines the permitting requirements. •Provide the environmental audit as an appendix to the application.

REPORTING OF TECHNICAL DATA

Regulatory Reference: 30 CFR 777.13; R645-301-130.

Analysis:

Environmental audit information has been accompanied by names of persons, dates and descriptions of methodology.

Findings:

The information provided meets the requirements of the Coal Rules.

MAPS AND PLANS

Regulatory Reference: 30 CFR 777.14; R645-301-140.

Analysis:

Maps include the types of information set forth on USGS 1:24,000 series maps. Maps of the permit area are of a scale of 1:6,000 minimum.

There was no coal mining conducted prior to August 1977. However, the applicant was allowed to develop the site without a permit (letter from Mary Ann Wright to W. Layne Ashton, COVOL Engineered Fuels, LC, September 13, 2004, **not found in Division files**; and had done some site development by June 15, 2005 (Inspection Report #639, filed in General/2006/Incoming). By the time the decision to permit was reached March 17, 2006 (M:\FILES\COAL\PERMITS\007\C0070045\2006\OUTGOING/0001.pdf) and the appeal of the decision had been filed May 12, 2006 (2006/Incoming/0001 and 0003.pdf) and the two parties agreed to settlement October 19, 2006 (not in Division files), the 20 acre parcel had been fully developed, but not the additional 10 acres to the south.

Findings:

R645-301-142: The application must indicate on a map the portion of the operation developed prior to the permit application dated January 15, 2008.

COMPLETENESS

Regulatory Reference: 30 CFR 777.15; R645-301-150.

Analysis:

The application was determined complete on March 14, 2008 (M:\FILES\COAL\PERMITS\007\C0070045\2008\OUTGOING). Some technical deficiencies were identified on the Apparent Completeness Review form. The first technical review due date was set for June 23, 2008. The Division has one year to review and either permit or deny the application.

Findings:

The information provided meets the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008.

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

SOILS RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.21; 30 CFR 817.22; 30 CFR 817.200(c); 30 CFR 823; R645-301-220; R645-301-411.

Analysis:

Per Division/COVOL Engineered Fuels, LC agreement, the application relies upon published soil survey information for that portion of the site that that has been disturbed by the operations to date, see.M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf and M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0008.pdf.

Sec. 2.2 states elevation of 5,530 ft. Photographs of pre-mining resources would be of benefit in lieu of any survey information. Soil Map must indicate Map Unit 80 Persayo/Chipeta complex and Map Unit 59 Killpack Clay Loam (green line) based on 1988 Carbon County Soil Survey. Soil Map must designate elevations (the light brown and dark brown lines).

The ten acres not yet disturbed will be subject to the requirements of the Coal Rules for soil survey prior to disturbance.

Findings:

The information provided does not meet the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008.

R645-301-220, The application should include a statement that prior to any future disturbance, a soil survey consisting of one soil sample/2 acres and analysis according to the Division guidelines will be conducted • Photographs of premining resources should be added to the application to supplement the Carbon County soil survey information. • Soil Map must indicate Map Unit 80 Persayo/Chipeta complex and Map Unit 59 Killpack Clay Loam (green line)

based on 1988 Carbon County Soil Survey. Soil Map must designate elevations (the light brown and dark brown lines).

LAND-USE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.22; R645-301-411.

Analysis:

The land is zoned for industrial use, Figure 4-1. The site will be reclaimed for industrial use.

Findings:

The information provided meets the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008.

PRIME FARMLAND

Regulatory Reference: 30 CFR 785.16, 823; R645-301-221, -302-270.

Analysis:

The application correctly states there is no farmland on the ridge where the site is located, see.M:\FILES\COAL\PERMITS\007\C0070045\2007\INCOMING\0005.pdf and M:\FILES\COAL\PERMITS\007\C0070045\2007\OUTGOING\0008.pdf.

Prime Farmland and Farmland of Statewide Importance was designated (by the USDA) along the Miller Creek drainage to the south and along the Price River drainage to the north [Utah Agricultural Exp. Sta. Res. Rpt. #76].

1979 USDA aerial photos show an irrigation canal running through the property and agricultural land immediately to the west. This irrigation canal has since been abandoned.

Findings:

The Division determined extent of investigation in accordance with R645-302-313, and finds that there is no prime farmland within the permit area.

OPERATION PLAN

AIR POLLUTION CONTROL PLAN

Regulatory Reference: 30 CFR 784.26, 817.95; R645-301-244, -301-420.

Analysis:

June 30, 2005 DAQE-AN2952003-05 issued to COVOL Engineered Fuels, LC in App. 4-1, allows process of 1.5 million tons of coal over 12 month period. Equipment: one crusher, one screen, two hoppers, 3 air tables, 3 fabric filter baghouses treating exhaust air from air tables, covered or enclosed conveyors, telescoping discharge tubes. one 200 ton storage silo. Opacity from screens conveyor transfer and baghouse stacks to be 10%, Crushers are allowed 15% opacity. Dust control on operational areas by water sprays Haulroad paved (0.69 miles).

Headwaters Energy Service notified the Division of Air Quality of the initiation of construction on August 5, 2005, in accordance with DAQE-AN2952003-05 (M:\FILES\COAL\PERMITS\007\C0070045\2006\INCOMING\11152006). The same letter notes that once construction has been completed and initial startup takes place, the required notification will be made. A second letter dated February 2006 indicates that the annual emission inventory for the facility was not required because the facility was still under construction and production had not yet taken place. The 2006 letter promises notification of the onset of production. To avoid any confusion, the application should provide documentation that this start-up documentation has been made to DAQ.

The diagrams provided to acquire an air quality permit provide the most information on the site process (see M:\FILES\COAL\PERMITS\007\C0070045\2006\INCOMING\11152006).

Findings:

The information provided does not meet the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008. Prior to approval, the Permittee must provide the following information:

R645-301-421, Please include in the application correspondence with the Division of Air Quality regarding notification of the onset of production.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-230.

Analysis:

Topsoil Removal and Storage

Section 2.3.1.4 and Sec 2.3.4.2 indicate that a 500 cu. yd. stockpiled was placed in an area 5,500 sq. ft., and has been marked and seeded with grasses and forbes described in Table 3-1, and is protected by a silt fence. The date of pile construction and seeding is required.

Findings:

The information provided does not meet the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008. Prior to approval, the Permittee must provide the following information:

R645-301-231.400, Please include in the application the date of pile construction and seeding.

RECLAMATION PLAN

POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

Analysis:

Reclamation will support industrial land use (Sec. 4.1.2.1 and Figure 4-1.) Section 4.1.3.2 indicates post mining land use as that which existed before the operation began. [photographs accompanying DOGM Inspection Rpt. #639, dated June 15, 2005 illustrate condition of land just as operation was beginning.]

Findings:

The information provided meets the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008.

TOPSOIL AND SUBSOIL

Regulatory Reference: 30 CFR Sec. 817.22; R645-301-240.

Analysis:

Redistribution

Sec. 2.40 states limited replacement of soil in (unspecified) areas to facilitate the industrial post mining land use.

Due to high clays and sodicity, grading work and chiseling when soil is dry must be indicated.

Findings:

The information provided does not meet the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008. Prior to approval, the Permittee must provide the following information:

R645-301-242.200, Due to high clays and sodicity, grading work and chiseling when soil is dry must be indicated in the reclamation plan.

STABILIZATION OF SURFACE AREAS

Regulatory Reference: 30 CFR Sec. 817.95; R645-301-244.

Analysis:

Broadcast seeding in described in Sec. 3.40. The final seed mixture is the same as that used on the topsoil stockpile (Table 3-1). Pre-disturbance photos indicate that greasewood, and rabbitbrush do not belong in the seed mix.

Findings:

The information provided does not meet the requirements of the Coal Rules and the settlement negotiation dated October 16, 2008. Prior to approval, the Permittee must provide the following information:

R645-301-242.200, Greasewood, and rabbitbrush do not belong in the seed mix for this ridge location, please adjust the seed mix in Table 3-1 accordingly.

RECOMMENDATIONS:

Further information is requested prior to approval of this permit application.

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